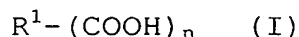


ABSTRACT OF THE DISCLOSURE

A polymethylaluminoxane preparation exhibiting excellent storage stability with a high yield is provided. A

5 polymethylaluminoxane preparation is formed by thermal decomposition of an alkylaluminum compound having an aluminum-oxygen-carbon bond, the alkylaluminum compound being formed by a reaction between trimethylaluminum and an oxygen-containing organic compound. In this preparation,

10 (i) the oxygen-containing organic compound reacting with trimethylaluminum is an aliphatic or aromatic carboxylic acid represented by the general formula (I),



(wherein R^1 represents a hydrocarbon group of C1-C20 straight

15 or branched alkyl groups, alkenyl groups or aryl groups, and n represents an integer of 1 to 5);

(ii) a mole fraction of methyl groups originating from aluminoxane part, relative to the total moles of methyl groups existing in the generated polymethylaluminoxane preparation is
20 not more than 26 mol%; and

(iii) the generated polymethylaluminoxane preparation has a viscosity of not more than 2.1×10^{-3} Pa•sec at 40°C.